From: Laurie Valeriano [mailto:lvaleriano@watoxics.org]

Sent: Wednesday, August 09, 2006 3:01 PM

**To:** Bradley, Dave (ECY); Kmet, Peter **Subject:** Comments on dioxin/cleanup

Importance: High

August 9, 2006

## Dear Dave:

We are writing to support Ecology's proposed rulemaking efforts to clarify the application of the Toxicity Equivalency Factor (TEF) in mixtures of dioxins/furans, PAHs, and PCBs. This rule is important for the protection of human health and the environment from these particularly problematic classes of persistent bioaccumulative toxic chemicals and we thank Ecology for pursuing this change.

We understand that the rule is being changed to reflect the scientific and policy approach Ecology has taken for years with respect to the use of the TEF factor and risk standard for setting cleanup levels of dioxins and furans (dioxin). Under the state cleanup law -the Model Toxic Control Act (MTCA)-Ecology has used the TEF method, an accepted standard by EPA for cleanup actions nationwide. This approach results in a single number that best represents the combined toxicity of the dioxin found in soil and sediment samples at a cleanup site available to latch on to animal protein receptors and effect physical damage. Ecology applies this number to the cleanup standard of 1 in a million risk, which results in a 6.7 ppt cleanup standard.

This standard should be explicit in the MTCA rule because recently Rayonier, Inc. sued the agency to obtain a different, less stringent interpretation. It is important that this rule be amended and adopted as soon as possible to prevent the use of a less stringent standard for dioxin.

Below are the issues Ecology raised with respect to the dioxin/furan mixtures and our initial responses:

1. Should Ecology use the EPA-89 TEF values or the WHO-98 values?

The TEF method is a scientifically valid approach that is widely used by state and federal health and environmental agencies. Recently, the National Academy of Sciences (NAS 2006) re-affirmed the scientific basis for the values used in WHO-98. We support the use of WHO-98 values or the more updated 2005 values. The WHO-98 values are being used by numerous programs: PBT program, Environmental Assessment Program, Water Quality Program and others. EPA and ATSDR use these values as well. It makes sense to update the values to be consistent with other programs.

2. Should dioxin/furan mixtures be treated as a single hazardous substance when calculating excess cancer risk and determining compliance with cleanup and remediation levels under MTCA?

Ecology should treat dioxin/furans as a single hazardous substance so that the cancer risk used is 1 in a million. We think it is important to use the more stringent standard in the case of dioxin and not allow a 1 in 100,000 risk level to apply.

In general we are deeply concerned about the use of risk based standards when considering the health impacts of any persistent bioaccumulative toxic chemicals. The risk approach to regulation has been a primary reason we are at the point where our bodies are contaminated with numerous PBTs at levels that have shown to cause harm in humans and animals; orca whales are among the most contaminated mammals on earth; and ,our babies in the womb are exposed to hundreds of chemicals with known toxic effects even before birth. This is unacceptable and all PBTs should be cleaned up to levels that are as close to zero as possible. Further, we are concerned about cumulative impacts and the lack of monitoring/sampling that addresses multiple exposures from all media to the biota of Puget Sound.

However, given that the current MTCA cleanup levels are derived through the use of risk assessment,we support the use of the more stringent level of 1 in a million for the following reasons:

- \* Dioxin is a potent carcinogen. The National Academy of Sciences report of July 2006 confirmed what numerous scientific panels have concluded over the past 15 years: dioxin is a potent cancer-causing chemical.
- \* According to leading scientist Dr. Richard Clapp of the Boston School of Public Health, "...there does not appear be safe 'threshold' for dioxin's carcinogenic effects. Evidence has accumulated since EPA began its reassessment in 1991 that dioxin also causes many other health problems even at low levels, such as developmental problems in children, immunologic problems in children and adults, reproductive problems in adults, and diabetes." (http://www.chej.org/dioxin/index.htm)
- \* According to the US EPA draft report on dioxin's health effects ("Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds), the levels of dioxin-like compounds found in the general population may cause a lifetime cancer risk as high as one in 1,000. This is already 1,000 times higher than the 1 in a million cancer risk being applied in cleanup decisions. In other words, the general population is already being exposed at an unacceptable risk level and communities where cleanups are happening or dioxin generating facilities once operated (pulp mills, incinerators, wood treatment, etc.) are more highly exposed populations and should be protected.

\* Washington state is pursuing significant efforts to cleanup up Puget Sound and to prevent and cleanup PBT chemicals. Adopting the more stringent cleanup level supports and is consistent with these programs.

We appreciate the opportunity to comment on the rulemaking proposal. Please contact Laurie Valeriano if you have any questions 206-632-1545x114. Thank you.

Sincerely,

Laurie Valeriano Policy Director Washington Toxics Coalition

Darlene Schanfald Project Coordinator Rayonier Hazardous Waste Cleanup Project Olympic Environmental Council Coalition

Heather Trim Urban Bays Coordinator People For Puget Sound

Steve Gerritson Sierra Club--Cascade Chapter

BJ Cummings Duwamish River Cleanup Coalition From: Pam Johnson [mailto:pamjohnson9@yahoo.com]

Sent: Friday, August 11, 2006 3:19 PM

To: Bradley, Dave (ECY)

Cc: Kmet, Peter; Laurie Valeriano

**Subject:** More signers for MTCA rule letter

Hi Dave.

For the record, can you add these three organizations to the letter Laurie Valeriano sent you on Wednesday? Thanks, Pam

Greg Wingard Waste Action Project

Pamela Tazioli Washington State Coordinator Breast Cancer Fund

Bonnie Beavers Upper Columbia River Group Sierra Club